

STANDARD FORM NO. 64

CONFIDENTIAL
Office Memorandum • UNITED STATES GOVERNMENT

TO : Chief, Engineering Division, OC

FROM : Chief, Supplemental Programs Division, OC

SUBJECT: High Gain Broadband Antenna Development

DATE: SPM 8-554
13 February 1958

REFERENCE: SPM 8-515

1. The antenna requirement as outlined in the referenced memorandum is being constructed on an urgent basis by tolerating several design compromises. We request, therefore, that you continue investigating the feasibility of developing an antenna with one feed for the 150 to 1000 megacycle range. All the physical parameters should remain the same, as referenced, to provide a direct comparison of cost, gain, and operating ease.

2. The truncated parabola for wide vertical beam, narrow horizontal beam, and single feed is the preferred antenna. This follow-up program has been requested by the operations unit with their assurance that funds are available contingent upon our recommendations based on a cost and advantage comparison.

3. Any continuation of this search for the ideal antenna appears timely considering our future requirements and the military's interest in forcing this particular state-of-the-art. Your assistance and recommendations are requested in attempting to join the two antenna extremes of high gain and broadband capabilities.

for
Acting

Distribution:
Orig & 1 - Addressee

DOC <i>B</i>	REV DATE	19 MAR 1980	BY	064540
ORIG COMP	033	OPI	56	TYPE 02
ORIG CLASS	5	PAGES	2	REV GLASS C
JUST	22	NEXT REV	2010	AUTH: HR 70-2

CONFIDENTIAL

AN-19... Broad band "high gain

Antenna.

CONFIDENTIAL

Tech chara are:

1. Frequency 150 to 1000 megacycles.
covered in 3 bands w/ 3 inter
changeable fults.
2. V.S.W.R. less than 3:1.
3. Gain: 8 to 26 db over the spec freq
range.
4. Input Impedance 50 Ω unbal

CONFIDENTIAL